

2008 ANNUAL REPORT

CLARK COUNTY ENGINEER

WELCOME 2009

As the newly elected Clark County Engineer, I am honored to begin my service here in Clark County. I would like to take this opportunity to share a few things about myself. I am a lifelong resident of Clark County, having graduated from Northeastern High School in 1988, Clark State in 1990, and then from Ohio University with an engineering degree in 1994. I am married to Michelle, a graduate of North High School, and we are blessed with our son Lucas, and daughters Anna and Regan. I have spent the last fifteen years in the private sector working as a design engineer for Hoppes Engineering & Surveying. There, I performed various functions in residential, commercial and industrial subdivision and site design, including design of storm water facilities, sanitary sewer, waterlines, earthwork calculations and boundary surveys.



Johnathan A. Burr, P.E., P.S.
Clark County Engineer

My term began January 5, 2009, and I was soon presented with new challenges like snow and ice storms during the first month. I found out quickly what was expected by the citizens of Clark County as well as what our staff could deliver in terms of service. We were stretched pretty thin a few times and even went to 12-hour shifts to maintain coverage on the 300+ miles of roads maintained by this office.

Being new to the office, the focus of the 2008 Annual Report is to recap the many projects completed last year. Preparing the report also enabled me to get a good feel of what type of projects are completed each year and allow me to plan future projects. I would like to thank the former County Engineer, Mr. Bruce Smith, for his many years of service to Clark County and note projects accomplished under his direction.

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MAY, 2009

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Special points of interest:

- * New Clark County Engineer
- * Grant funds assist Clark County

Last year brought a myriad of changes, such as the new load rating requirement for bridges enacted by the state. We have 5 years to load rate all 239 bridges in the County, under this new system. While this may seem reasonable and prudent, it's estimated to cost in excess of \$500,000 to accomplish this task over five years. Along with that came the higher prices for materials, especially petroleum based products which are utilized in our maintenance operations. The cost of asphalt jumped 23% from 2007 to 2008, and the cost of asphalt emulsion used for chip & seal jumped 7.3% for the same period. The cost of fuel nearly doubled from \$2.34/gallon for diesel to \$3.47/gallon, or 43.8% increase in the same period. The other big increase came in bulk salt used for deicing. We saw an increase from the previous year, but Clark County was quite fortunate to receive the prices we did. Most agencies saw prices double or triple, to well over \$100 per ton. On top of all the price increases, Clark County was hit by windstorm in September that resulted in massive cleanup efforts. Our costs exceeded \$75,000. Hopefully we will fare better this year, in that regard.

Highlights included the replacement of the St. Paris Pike Bridge over Mad River, Black Pike Bridge over the East Fork of Honey Creek and several smaller bridges constructed by county forces. The Gerlaugh Road Project, was bid and will hopefully be completed by August 2009. The following pages highlight the various projects either constructed, or in the planning and design phase for upcoming projects. I look forward to serving the people of Clark County and welcome the challenges that come with it. ♪

2008 ROAD RESURFACING

This was a cooperative bid by the Clark County Engineer, including other governmental jurisdictions located in Clark County, Ohio, for the purpose of constructing 16,497 tons of asphalt concrete as an overlay on Enon Xenia Road, Upper Valley Pike, and various township roads. In addition, the contractor applied 152,250 square yards of chip seal as surface treatment on county and township roads. The contractor was The Shelly Company of Belle Center, Ohio and the contract amount was \$1,435,537.09.

2008 MICRO SURFACE CONTRACT

This was a cooperative bid by the Clark County Engineer, including other governmental jurisdictions located in Clark County, Ohio, for the purpose of providing various types surface treatment, including SAMI (Stress Absorbing Membrane Interlayer), SAMI (Fiber Mat Type B Interlayer) and Single micro surfacing to various county and township roadways. The county roads surfaced under this contract included Snyder Domer Road, Springfield Xenia Road and Old Columbus Road between SR 54 and Madison County Line. The contractor was Terry Materials of Hamilton, Ohio and the final contract totaled \$476,912.25.



Road Name	Length	Description	Cost
Ansbaugh Road	1.02	Single Chip Seal	13,782
Enon Xenia Road	1.63	Asphalt overlay	143,102
Hampton Road	4.92	Single Chip Seal	76,974
Houston Pike	5.13	Single Chip Seal	72,963
New Carlsile - St. Paris	3.87	Single Chip Seal	53,666
Old Columbus Road	4.22	SAMI & Microsurfacing	232,433
Snyder Domer Road	3.86	Microsurfacing	85,365
Springfield Xenia Road	2.09	Microsurfacing	66,985
Stott Road	2.00	Single Chip Seal	27,023
Thackery Road	0.76	Single Chip Seal	10,269
Thomas Road	1.97	Single Chip Seal	26,618
Upper Valley Pike	2.07	Asphalt overlay	207,191
Strip Seal - Various		Single Chip Seal	89,888
	33.54		1,106,261

2008 GUARDRAIL

The Clark County Engineer's Department received \$300,000 in federal funding to update deteriorated guardrail throughout the county. The project was a non-traditional Local Public Agency (LPA) project in that Clark County handled the construction management, inspection, and payment processing. This project required the removal of approximately 10,000 feet and replacement of over 12,000 linear feet of Type 5 guardrail as well as the associated anchor assemblies. This project involves locations in German Township (Snyder-Domer Road), Moorefield Township (Old Mechanicsburg Road, Moorefield Road), Mad River Township (Enon-Xenia Road, Haddix Road, Dayton-Springfield Road, and Tecumseh Road) and Pleasant Township (Vernon Asbury Road) within Clark County. The contractor, PDK Construction of Pomeroy, Ohio was selected to perform the work. The final contract amount was \$319,849.38.



2008 PAVEMENT MARKING

This was a cooperative bid by the Clark County Engineer, including other governmental jurisdictions located in Clark County, Ohio, for the purpose of providing (retracement) pavement markings in the form of center line, edge line, lane line and channel lines in various locations within Clark County. The County contracted with Oglesby Construction of Norwalk, Ohio to paint selected roads. The final contract amount was \$149,438.84.

BRIDGE REPLACEMENT AND REHABILITATION

BRIDGE NO. 55 BLACK PIKE

This project included the replacement of the existing single span pre-cast box beam structure over the East Branch of Honey Creek, with a single span 68.5' non-composite pre-stressed concrete box beam structure on drilled shafts, including approach roadway improvements. The bridge was designed and constructed as part of ODOT's Credit Bridge Program, which will provide matching credit towards a future federally funded project. The contractor, Brumbaugh Construction, completed the project under budget at a cost of \$301,891.16.



BRIDGE NO. 235 ST. PARIS PIKE OVER MAD RIVER

This project included the rehabilitation of the superstructure on a 200' three-span continuous steel beam bridge over the Mad River in Moorefield Township. Key components included the removal of the existing superstructure, reconstructing integral abutments, and installation of new galvanized steel beams with a composite concrete deck. The work also includes approach slab construction and guardrail installation. The County received 80% federal funds

towards the project, which totaled \$661,921.96. The bridge was designed by Jones Stuckey and built by Eagle Bridge Company of Sidney, Ohio.

BRIDGE NO. 270 TREMONT ROAD

The County contracted with Jones Stuckey of Columbus, Ohio to provide plans for the rehabilitation of the superstructure on a 200' three-span continuous steel beam bridge over the Mad River in German Township. Key components will include the removal of the existing superstructure, reconstructing integral abutments, and installation of new galvanized steel beams with a composite concrete deck. The County is seeking funding for the construction, estimated at more than \$800,000.

FORCE ACCOUNT BRIDGE AND CULVERT PROJECTS



The County utilized county crews to repair or construct several bridges during 2008. The list includes:

- **Addison Carlisle Bridge No. 1**
Removed portion of the deck, replaced steel beams
- **Detrick Jordan Bridge No. 66**
Extended the twin CMP culvert pipes, to permit shoulder and guardrail improvements.
- **Woosley Road Bridge No. 816 (left)**
Replaced twin culverts with 12' X 6' box culvert



- **Union Road Culvert**
Existing twin 36" corrugated metal pipes were replaced with twin 43" X 68" horizontal elliptical reinforced concrete pipes, full height headwalls, an improved outlet channel and rock channel protection. The project will greatly improve the capacity under Union Road and thereby reduce issues related to backing up of stormwater.

ASSISTING OTHER AGENCIES

COMMUNITY DEVELOPMENT PROJECTS

- **Crystal Lake Park Improvements**

The County Engineer assisted Bethel Township with plans and project management for the construction of off street parking, walkway and shelter in Crystal Lake. The contractor, Outdoor Enterprise of Casstown, OH completed the project at a cost of \$55,000.

- **Limecrest Drainage Improvements, Phase 4**

The County Engineer provided surveying and project management for the final phase of drainage improvements in the Limecrest Subdivision. The site plans were developed by Kristin Eggeman P.E. of Clark County, Ohio. The contractor, LeVan's Excavating of West Liberty, Ohio completed the storm sewer project at a cost of \$90,647.

GRANT FUNDED PROJECTS

SAFETY FUNDING

- ***Dayton Springfield Road***

Clark County received federal funds to perform a Formal Safety Engineering Study of Dayton-Springfield Road from the Greene County Line to the Enon Village limits. The study included a detailed report, based on existing conditions, features, traffic patterns & crash reports provided short, medium and long term countermeasures and the associated costs. The County consulted with Lockwood, Jones & Beal of Dayton, Ohio. The study is a precursor for an upcoming project to improve portions of Dayton Springfield Road, including some widening, turn lanes and a new signal at Stine Road.

- ***East Side Traffic Study***

Clark County and City of Springfield received federal funds to a comprehensive traffic study of the existing and potential future conditions of transportation corridors in and around US Route 40 on the east side of Springfield. The objective of this study was determine the impacts of recent annexations and land use changes on the transportation system, as well as prepare for future annexations and new development. The consultant, Trans Associates, was required to assess the current and potential development impacts to the transportation system, and provide traffic engineering and transportation planning recommendations to improve the system.

- ***Lower Valley Pike Speed Study***

Clark County received federal funds to study the Lower Valley Pike corridor and make account for planned safety improvements in the study area including a new traffic signal at the Gerlaugh Road intersection, two active speed warning signs near Union Road, a "Stop Ahead" sign and beacon at Spangler Road, and rumble strips at the Enon Road intersection.

- ***Selma Road & Possum Road***

Clark County received federal funds to study and make safety improvements at Selma Pike and West Possum Road. The intersection has been identified for improvements. Above ground utility features are being relocated out of the line of sight, and install new speed warning signs.

GERLAUGH ROAD PROJECT

The Clark County Engineer's Department has received federal funding to upgrade and improve Gerlaugh Road, with a combination of full depth and salvage sections, graded shoulders, storm sewer and a new traffic signal at Lower Valley Pike. Upgrading 1.49 miles of TR 6 Gerlaugh Road, between State Route 235 and Lower Valley Pike, by widening and asphalt overlay. The County has contracted with A&B Asphalt Corporation of Enon, Ohio to perform the work at a cost of \$2,351,436.17. Completion is estimated in late August, 2009

UPPER VALLEY PIKE SHRINE ROAD IMPROVEMENTS

The County hired WEC Engineers of Ohio for preliminary and detailed designed of Upper Valley Pike, from the railroad to Cottonwood and Shrine Road to Locust Drive. The plans are being developed in accordance with \$2.88 million in funding received by Clark County for roadway and safety improvements. Construction will likely occur in 2012.

URBANA ROAD & MOOREFIELD ROAD SIGNAL IMPROVEMENTS

The Clark County Engineer's Department received federal safety funding to improve the existing traffic signal at the intersection of Urbana Road and Moorefield Road in Moorefield Township. The project replaced the existing signal span wire configuration, and adds one additional signal head on the existing southeast strain pole to improve visibility for westbound traffic on Moorefield Road. It will also relocate the detector loop for southbound to eastbound traffic to trigger the protected left phase, and it will update the signal with new LED signal heads. The detection on Urbana Road will also be updated. The signal project is located on Urbana Road, at the intersection with Moorefield Road approximately $\frac{3}{4}$ mile north of State Route 72 and State Route 334 intersection. The project was designed by Brigham Engineering and built by Bright Street electrical contractors of Dayton, Ohio. The cost is estimated at \$67,856.22, with the county receiving in excess \$57,000 in federal funds towards the project. Completion expected in early 2009.



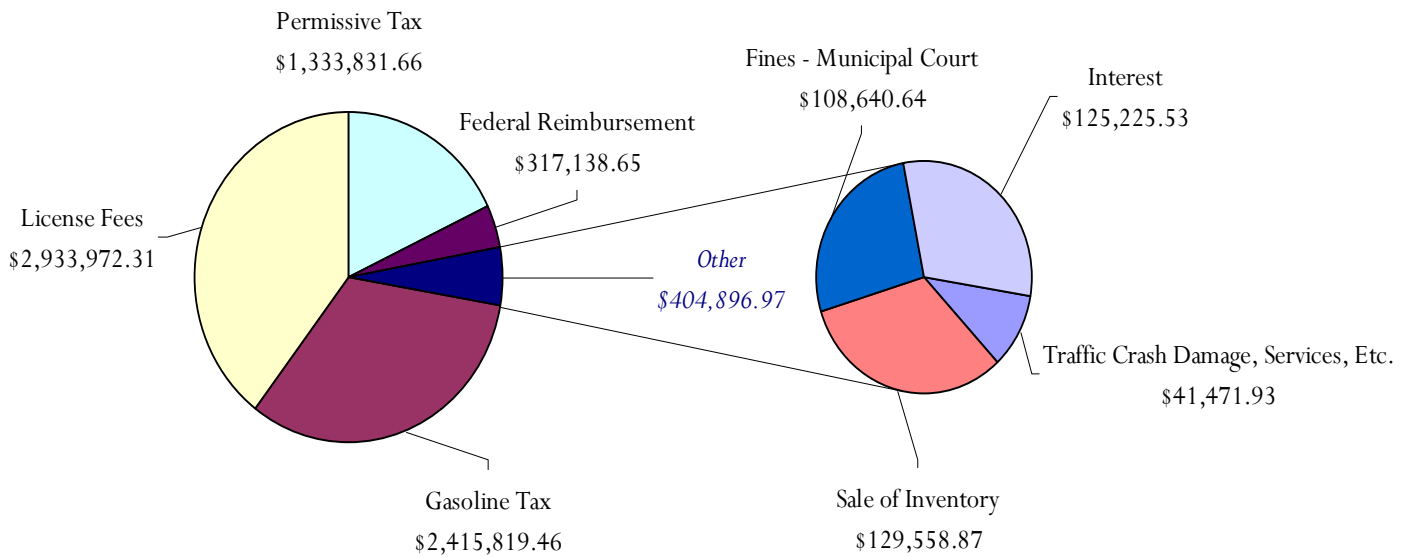
STATE ROUTE 794

The Clark County Engineer's Department received federal funding to begin the design and right of way phases of a project to relocate State Route 794 (West Blee Road) away from the Air National Guard base. The Ohio Department of Transportation will provide up to a maximum of \$1,180,000 for the design, right of way, and construction of the project. The Clark County Springfield Transportation Coordinating Committee will provide the twenty percent match toward design (\$50,000) that was previously contributed by the Clark County Engineer, the Clark County Board of Commissioners, and the City of Springfield.

Consultant services include completion of construction contract plans for State Route 794 (West Blee Road) in Clark County with a project length of approximately 1.2 miles. State Route 794 will be realigned to obtain required clearance from the Ohio Air National Guard Base. American Structurepoint, Inc. of Columbus was selected to design the new alignment and prepare construction plans. The total fee for preliminary engineering, environmental services, detailed right of way plans, and detailed construction plans will be \$401,837.

Construction is currently scheduled to begin in 2012 and will cost nearly \$3,000,000.

2008 REVENUE



2008 MOTOR VEHICLE AND GAS TAX FUND EXPENSES

Payroll	2,283,054.90
Fringes	936,073.75
Supplies/Print	13,535.65
Education	1,638.85
Materials/Salt	844,694.50
Land Acquisition	130,415.18
Equipment	363,079.36
Contract Services	261,355.21
Contract Projects	1,486,920.04
Miscellaneous	199,018.73
Diesel/Gasoline	276,651.48
Garage /Equipment Repair	276,991.10

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